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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/253,117 | 02/19/1999 | JOZSEF KIRALY | ASCI-006 | 5244 |
| 7590 02/06/2008 WAGNER MURABITO & HAO TWO NORTH MARKET STREET | | | · . EXAMINER | |
| | | | BROWN, RUEBEN M | |
| THIRD FLOOR SAN JOSE, CA 95113 | | | ART UNIT | PAPER NUMBER |
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| | | • | 02/06/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
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| | 09/253,117 | KIRALY, JOZSEF | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Reuben M. Brown | 2623 | | | |
| The MAILING DATE of this communication ap Period for Reply | pears on the cover sheet with the o | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING IDENTIFY TO THE MAILING IDENTIFY THE MAILING IDENTIFY TO THE MAILING IDENTIFY TH | DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tired will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDONE | N. mely filed In the mailing date of this communication. ED (35 U.S.C. § 133). | | | |
| Status | | | | | |
| 1)⊠ Responsive to communication(s) filed on 13 I | November <u>2007</u> . | | | | |
| | | | | | |
| 3) Since this application is in condition for allowa | | | | | |
| closed in accordance with the practice under | Ex parte Quayle, 1935 C.D. 11, 4 | 53 O.G. 213. | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-44 is/are pending in the application 4a) Of the above claim(s) is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-44 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/ | awn from consideration. | | | | |
| Application Papers | • | | | | |
| 9) The specification is objected to by the Examin 10) The drawing(s) filed onis/ are: a) acceptable and applicant may not request that any objection to the Replacement drawing sheet(s) including the correct and the option of the correct and the cor | cepted or b) objected to by the drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob | e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d). | | | |
| Priority under 35 U.S.C. § 119 | | | | | |
| 12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of: 1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureat * See the attached detailed Office action for a list | nts have been received. Its have been received in Applicat prity documents have been received in Applicat (PCT Rule 17.2(a)). | ion No ed in this National Stage | | | |
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| | | | | | |
| Attachment(s) | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other: | ate | | | |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/13/2007 has been entered.

Response to Arguments

2. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

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4. Claims 1-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ice, (U.S. Pat #5,884,031), in view of Grau, (U.S. Pat #5,818,906), Ishida, (U.S. Pat #6,122,259), and further in view of Cucchiara, (U.S. Pat #6,141,680).

Considering amended claims 1, 8, 15, 24 & 35, Ice discloses an information transfer systems and methods for broadcasting files to a plurality of receiving destinations comprising the steps of: causing a transmitting communication Server A to transmit a first stream of data representing digital broadcast information to relaying client system C 1 & C2, wherein server A and clients Cl & C2 may be coupled to the Internet, (Abstract; col. 1, lines 25-45; col. 2, lines 1550). Ice furthermore causes client devices C 1 & C2, to relay broadcast information the next level of client systems; such as C3-C6 see Fig. 1 & col. 3, lines 11-28.

Regarding the amended claimed feature of, "receiving, at a transmission scheduler, a request from a first user device", "a second user device" and a "third user device". Ice supports transmitting requests for information from a subscriber terminal, to a server, Abstract; col. 3, lines 1-15.

As for the further claimed feature of transmission of broadcast information, Ice is directed to computer files, which is not necessarily the same as 'digital broadcast information'. Nevertheless, Grau teaches broadcast of requested digital programming, col. 4, lines 20-22. It would have been obvious for one of ordinary skill in the art at the time the invention was made,

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to modify Ice with the feature of digital broadcast, at least for the desirable advantage providing the user with a wider range of content, as taught by Grau.

With respect to the amended claimed feature of receiving and rendering the broadcast information in a first user device as well as the second or third user device to which the first user device transmits or relays the instant broadcast information, this feature reads on the operation of Ice, col. 3, lines 62-67. However, Ice does not explicitly teach the additionally claimed feature of 'receiving and rendering, *concurrently* the broadcast information on the first, second and third user devices', emphasis added.

Nevertheless, Ishida discloses a system wherein video information is simultaneously multicast to all of the user data terminals in the system. It is specifically taught that each of the multipoint conference devices receives multicast data such as audio & video, and displays the data on the monitor, while relaying it to the subsequent terminal, col. 4, lines 21-27, which reads on the claimed feature. One of ordinary skill in the art at the time the invention was made would have been motivated to construct a system with as little delay as possible, thereby enable concurrent reception and display of information among all of the participating clients, since in fact all of the clients are receiving the same information. If the clients at the end of the relay (intermediate or last levels) receive their information with a significant delay, such an arrangement would represent an undesirable quality of service value for the instant clients, especially for live or real-time events.

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It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ice with the teachings of Ishida providing concurrent reception and display of audio/video data to all the terminals in a network using a relay algorithm, at least for the desirable advantage of supporting real-time communication or events, which is the purpose of Ishida.

As for the additionally amended claimed feature, 'wherein the user devices form one or more communication chains such that each chain has one more tiers' is met by Ice, (Fig. 1). The claims additionally recite that 'the sum of user devices in corresponding tiers of the communication chains is variable', instead of pre-determined. Examiner points out that Ice discloses an embodiment with pre-determined *maximum* number of clients directly connected to the server A, and a pre-determined *maximum* of clients downwardly connected to each relaying client; see col. 1, lines 35-45; col. 2, lines 18-28 & col. 3, lines 64-67. However, the actual number clients downwardly connected to each relaying client is still variable, *up to the maximum*.

Thus Ice meets the amended claimed subject matter, since each particular client has a variable number of clients downwardly connected, i.e. between 0 and 4. Therefore the sum of user devices in the corresponding tiers of Ice is variable and not pre-determined. Moreover, Ice clearly teaches that the pre-determined rules of the network may be changed in order to vary the structure of the network, col. 4, lines 18-27.

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Regarding the newly claimed technique of 'each user device sending its update status to a transmission scheduler, which monitors the update messages and initiates changes among the server and user devices', Ice does not explicitly teach such a feature. Nevertheless, Grau teaches a method of monitoring the performance of a network, and making adjustments to the network in order to optimize the instant network, Abstract; col. 2, lines 45-67 thru col. 3, lines 1-15; col. 9, lines 1-65 thru col. 10, lines 1-65. Grau specifically discusses detecting failures in the system by taking periodic status updates and as a result initiates a network re-configuration, (which reads on 'initiates changes...'. It would have been obvious for one of ordinary skill in the art at the time the invention was made, to modify Ice with the technique of managing a network by using failure based and performance-based changes to the network, at least for the well known desirable advantage of optimizing the performance of the network, as taught by Grau, see col. 1, lines 5-35 & col. 2, lines 45-67:

The claimed 'transmission scheduler that this separate from the server' reads on the cable control unit, CCU 2 of Grau, whereas the server corresponds with the combiner 108, see Fig. 1.

Regarding the additionally claimed feature of the, 'transmission scheduler, using the status update messages to initiate changes in the communication chains among the server and the user devices to provide monitoring and managing functionality'. Cucchiara provides a teaching of intermediate network managers that receive status information messages from one or more clients and use the information to affect the configuration of the network, which reads on the claimed subject matter, col. 5, lines 21-65 & col. 6, lines 1-65. It would have been obvious for

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one of ordinary skill in the art at the time the invention was made, to modify Ice with the feature of intermediate network managers that receive status information and manage the network, for the improvement of a more efficiently managed network, as taught by Cucchiara, col. 1, lines 15-55.

Regarding claim 8, in Ice the first group of user devices reads on C 1 & C2, the second group of user devices reads on C3-C6 (Fig. 1).

Regarding claim 35, the instant claim includes the limitation that the server is configured by a transmission scheduler to communicate the digital streams to the first & second devices and that the scheduler maintains communication links between the server and first, second & third user devices. Accordingly, examiner points out that Ice discloses that when the Server A receives a request from a client not in first level of clients, such as C3, the server A sends the instant client an instruction to connect to a particular client such as client C 1. Moreover C 1 is instructed to transmit information to particular additional clients.

Considering claims 2-4, 16-19, 27-30 & 37-40, Ice teaches a system and a method of transferring, communicating and broadcasting "files", but does not disclose the specific types or content of the files. Nevertheless, at the time the invention was made, transferring and broadcasting radio, audio, visual television and computer program files over a communications network was very well known in the art. Ishida teaches the multicasting of audio & video data, col. 3, lines 35-40 & col. 4, lines 21-23. Therefore, it would have been obvious to one of

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ordinary skill in the art at the time the invention was made to modify Ice to broadcast radio, audio, visual, television and computer files so that a user may access audio/video and program data in order to have a fully interactive entertainment system.

Considering claims 5, 11, 20, 31 & 41, Ice reveals client relaying communication devices C 1 & C2, wherein the systems are capable of receiving files and further relaying and communicating broadcast files to a plurality of other users (Fig. 1). Ice furthermore teaches that for instance client device C3, will receive broadcast information from C2, in the event that its original provider, C1, becomes inactive, see col. 2, lines 18-21, which reads on the claimed subject matter.

Considering claims 6-7, 21-23, 32-34 & 42-44, Ice teaches that client device C2, which is comparable to device C1, relays the broadcast information to further clients devices, in the same manner as C1.

Considering claim 9, Ice teaches direct communication links between the first group of electronic devices and the second group of electronic devices (claims 1 and 2).

Considering claim 10, Ice teaches that the server A includes a database 22 holding a list of all clients presently connected to the network, col. 2, lines 45-55. This disclosure suggests that the system tracks in real-time the connection status of clients, thereby reading on periodically updating the status of the devices.

Considering claim 12, Ice teaches terminating direct communications links with terminals

that disconnect from the server, i.e. become inactive, see col. 3, lines 44-50.

Considering claim 13, Ice discloses a first and second set of electronic devices each

comprising a computer system configured for receiving and relaying broadcast information (Fig.

1).

Considering claim 14, Ice is directed to operating over the Internet.

Considering claims 25-26 & 36, in Ice each user device that seeks to receive information

connects with server A over the Internet. Server A then instructs particular clients to connect

with the other specific clients and subsequently relay information. Ice also discloses maintaining

a log of clients on the system, see col. 2, lines 45-54.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

A) Messinger Network Management system

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Any response to this action should be mailed to:

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 www.uspto.gov

or faxed to:

(571) 273-8300, (for formal communications intended for entry)

Or:

(571) 273-7290 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reuben M. Brown M. Brown whose telephone number is (571) 272-7290. The examiner can normally be reached on M-F(8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Christopher Kelley can be reached on (571) 272-7331. The fax phone numbers for the organization
where this application or proceeding is assigned is (571) 273-8300 for regular communications and After
Final communications.

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Reuben M. Brown

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